

TAB E

**Application of BellSouth Corporation,
Pursuant to Section 271 of the
Telecommunications Act of 1996
To Provide In-Region, InterLATA
Services In Alabama, Kentucky,
Mississippi, North Carolina and South
Carolina**

WC Docket No. 02-150

DECLARATION OF CATHERINE E. PITTS

I. QUALIFICATIONS

1. My name is Catherine E. Pitts (formerly Petzinger). I am a consultant to AT&T on switch cost modeling issues. My business address is 810 Long Drive Road, Summerville, South Carolina.

2. I have an MBA from Rutgers University, New Jersey, and eighteen years of experience in the telecommunications industry. Before becoming an independent consultant earlier this year, I was employed for five years by AT&T Corporation as a District Manager in Regulatory and Legislative Affairs. Prior to joining AT&T, I was employed by Bellcore (now Telcordia Technologies) for 13 years. While at Telcordia, I was one of three individuals who designed and implemented new incremental costing methodology into the Switching Cost Information System/Intelligent Network (SCIS/IN) model. The SCIS/IN model is used to identify the costs associated

with switching "features" (e.g., call waiting, call forward, and caller ID) and belongs to the family of SCIS models used to determine the costs associated with switching in general. I was Telcordia's lead subject matter expert on feature costing, as well as a subject matter expert on the 1ESS, 1A ESS and 5ESS switches. When I was promoted to lead the SCIS group of approximately 20 people, I was responsible for the technical development, production, documentation, and customer care for the Switching Cost Information System/Model Office (SCIS/MO) and SCIS/IN models.

3. My experience also includes extensive consultation in the use of cost models in various cost studies in the United States and abroad. I have presented expert testimony regarding switching investments and costs in numerous unbundled network element ("UNE") and Universal Service Fund ("USF") proceedings.

II. SUMMARY AND PURPOSE OF TESTIMONY

4. The purpose of my testimony is to explain why BellSouth's switch unbundled rates violate TELRIC principles and cause CLECs to incur costs for UNE-P that are radically different than BellSouth's costs, resulting in discriminatory pricing. BellSouth has utilized cost study methodologies that: (1) overstate the price BellSouth pays its vendors for switching equipment resulting in an inflated cost structure, (2) improperly attribute certain costs to usage and features resulting in a cost recovery mismatch with the way BellSouth incurs costs, and (3) generally rely on unsupported and/or deficient modeling methodologies that produce non-cost based feature rates. In particular, BellSouth's Simplified Switching Tool ("SST") model (used in Alabama, Kentucky, Mississippi and South Carolina) that replaces the previously used Telcordia SCIS/IN model (used in North Carolina) has deficient feature cost modeling methodologies, causing seriously overstated feature-related costs.

III. BELLSOUTH'S SWITCH COST STUDY OVERSTATES THE PRICE BELLSOUTH PAYS ITS VENDORS FOR SWITCHING EQUIPMENT.

5. BellSouth used the new (replacement) switch price for equipment included in the first cost (getting started cost) of the switch¹ and a melded new and growth price for all remaining switch equipment.² Even if melding were appropriate, the manner in which BellSouth melded new and growth prices is severely flawed.³ The switching equipment vendors (in this instance, Lucent and Nortel) often provide a two-tiered pricing structure with lower prices for new switch purchases and higher prices for add-on, or growth, equipment. The SCIS/MO model used by BellSouth in all five states under review in this proceeding⁴ to estimate its switch investments includes only the list

¹ It appears that BellSouth used a melded new and growth price to the entire switch, including the first, or getting started, cost in North Carolina. Application of a melded discount, rather than a new switch discount, to the equipment that is always purchased as part of a new switch is incorrect. This error causes the minute of use and feature additive rate elements to be inflated because BellSouth allocates the getting started costs to the minute of use and features.

² The "first cost" of the switch is the initial up-front cost of purchasing a replacement switch, while the growth cost is the cost of switch equipment for adding equipment to an existing switch.

³ The new price of a digital switch is the maximum price that would be paid for a forward-looking switch, given the declining rate of growth for demand of narrow-band circuit switch services and the continuing cost decline for digital circuit switch equipment. If the new switch discount is melded with the growth discount, the overall switch prices and ultimately the switch element costs will be higher when compared to results obtained with exclusive use of the new switch discount.

⁴ The SCIS/MO model was used in all five states to develop the foundation switch investments for the switch unbundled network element rates, although North Carolina used an older version of SCIS/MO than the other states. BellSouth used the outputs from the SCIS/MO model as inputs in its SST model to allocate switch investments to the different switch unbundled rate elements in all but North Carolina. In North Carolina, BellSouth used the SST predecessor, the Switched Network Calculator (SNC) to allocate the SCIS/MO investments to the minute of use rate elements and the SCIS/IN model to develop feature additive port investments (the feature port rate was recently set to 0 by Bellsouth). My comments in this declaration pertain to all five states,

prices. BellSouth must enter discounts as inputs to derive net switch prices, but its approach violates TELRIC in two separate ways. First, the 5ESS switch discount used by BellSouth is incorrect and does not accurately reflect the price paid by BellSouth for new switches; and second, the mix of new switching equipment and growth equipment is heavily weighted towards growth equipment, causing switch unbundled element rates to be higher than cost.⁵

6. Instead of using the contract-specific new switch data, BellSouth sampled a small number of recent switch purchases to determine the discount inputs to reflect the price of new switches. However, the sampling chosen by BellSouth was not validated in any way, and when the discounts from the small sample of switch purchases are applied to all switches in the SCIS/MO model, the resulting prices exceed the contract prices. The erroneous discount derived from the sampling is used by BellSouth as an input in SCIS/MO to calculate the first cost (getting started cost) of the switch and in the new and growth switch discount melding process to represent the new switch discount causing all switch unbundled element costs to be inflated.

7. The second flaw in BellSouth's melded discount approach relates to the weighting of the *new* switch discount with the switch vendors' *growth* discounts. Once the new switch discount is correctly identified, it is necessary in BellSouth's melding methodology to weight this new switch discount percentage with the growth equipment discount percentage. BellSouth's derivation of the percentage of new and

unless explicitly noted.

⁵ As BellSouth has used a region-wide approach to developing its discount inputs to SCIS, the recent Georgia cost proceeding (docket 14361-U) is relevant for the discount inputs used in the five states under review in this 271 proceeding.

growth lines depends upon a snapshot of its switch purchase mix of new and growth lines between 1999 and 2002. Because BellSouth had already replaced most of its analog switches prior to 1999, BellSouth's choice of this particular time period ensures that the percentage of higher priced growth equipment is larger than lower priced new switch equipment.

8. If a melded new/growth switch price were appropriate to use in a TELRIC study, the melding should be determined by assuming that a new switch is purchased to serve current demand and calculating the net present value of future growth lines.⁶ If a new switch were purchased today, assuming 10.7% cost of money⁷, a 3.0% annual growth rate and a switch life of 16 years, 20% of the switch's lines would be growth and 80% of the switch's lines would be new using a net present value analysis.⁸

BellSouth's melding assumption of *****BEGIN CONFIDENTIAL*****

*****END CONFIDENTIAL***** greatly inflates the price of all switch unbundled elements.⁹

⁶ Future growth lines could be three to five years' growth to represent "reasonably foreseeable demand" or, arguably, the entire life of the switch. Regardless of the growth assumption, it is critical to assume that the current demand is served via the placement of a new switch at new switch prices.

⁷ The 10.7% cost of capital is a rough average of the approved cost of capital for the five states: 9.96% (NC), 10.00% (MS), 10.86% (SC), 11.25% (AL and KY).

⁸ See Exhibit 1 for this calculation. Growth rate, cost of capital, and switch life assumptions can be easily changed in Exhibit 1 to determine an overall new/growth meld.

⁹ BellSouth FCC Docket No. 01-277 Filing - Proprietary Reply Exhibit DDC-2, page 3 of 7.

IV. BELLSOUTH'S SWITCH COST STUDY DOES NOT MODEL FORWARD-LOOKING TRUNK EQUIPMENT TECHNOLOGY

9. BellSouth assumes that some of its trunks (including all ISDN Primary Rate Interface (PRI) trunks and ISDN packet trunks) are installed using a switch component called the Digital Line Trunk Unit (DLTU) on 5ESS switches.¹⁰ BellSouth could have chosen to have SCIS/MO calculate all its trunks on a SONET-based trunk component called the Digital Network Unit – SONET (DNUS). BellSouth acknowledged that “SONET network elements are the first choice for deployments to meet new demand and to replace existing non-SONET elements when needed.”¹¹ The DNUS is more efficient and cost-effective than the older trunk equipment and is the forward-looking technology of choice. Correcting the SCIS inputs to reflect the DNUS equipment in the current Georgia proceeding lowered the trunk costs eight percent.

V. BELLSOUTH HAS NOT MODELED ITS SWITCH NETWORK CORRECTLY, RESULTING IN INFLATED SWITCH UNE COSTS.

10. A local end office switch terminates lines to end user subscribers, provides dial tone and serves as the starting point and ending switch point of a telephone call from one subscriber to another. A tandem switch moves traffic from one end office switch to another end office switch and does not originate or terminate traffic. Some telephone companies use a limited number of switches that perform both functions in one switch. These switches are called combination local/tandem switches. BellSouth assumes that every switch that is not a remote switch is a combination switch, resulting in

¹⁰ The majority of BellSouth's switches are Lucent 5ESS switches, thus dominating the switch UNE costs.

¹¹ BellSouth Response to AT&T Interrogatory 1-36 in Georgia UNE Docket 14361-U.

no switches that perform only local end office functions and no switches that perform just tandem functions. This assumption about its switch network architecture is arbitrary and in no way reflects BellSouth's current network (as can be seen in the Local Exchange Routing Guide "LERG"), nor has BellSouth defended its assumption of a 100-percent combination local end office/tandem switch architecture as its forward-looking view of its switch network. BellSouth obtains end office switches under contract, but purchases tandem switches using a competitive bid process. BellSouth, however, applies only its end office discounts (that are flawed as described earlier) to all of its switches. As a result, tandem switch costs are not accurately reflected. The SCIS/MO model increases the getting started cost for a combination local/tandem switch compared to a local switch to account for additional fixed costs associated with the tandem equipment. BellSouth's processor utilization inputs do not reflect the higher utilization that would be expected from switches handling both local and tandem traffic. Because the getting started cost is allocated over the *utilized* processor milliseconds in BellSouth's methodology, the resulting cost per processor millisecond is inflated by the understated utilization inputs. The processing costs are then allocated to end office and tandem minute of use and feature rate elements. Assuming that every switch serves as both an end office and a tandem without taking into consideration the increased utilization inflates the local switch unbundled network costs.

VI. BELLSOUTH INAPPROPRIATELY ALLOCATES FIXED INVESTMENTS TO THE MINUTE OF USE AND FEATURE PORT ADDITIVE RATE ELEMENTS RESULTING IN COST RECOVERY THAT DOES NOT MATCH THE WAY BELLSOUTH INCURS ITS COSTS.

11. The "getting started" cost of a switch is often called the "first cost" or "start-up cost" and is approximately *****BEGIN CONFIDENTIAL***** *****END CONFIDENTIAL***** percent of the total switch investment in four of BellSouth's five-states under review.¹² Although a small percentage of this cost is associated with the central processor, the remainder reflects the costs associated with maintenance, administrative, test, and spare equipment, memory, and other common equipment in the switch. BellSouth's methodology allocates the entire getting started cost over the number of processor milliseconds being used.¹³ The getting started costs are ultimately recovered in the minute of use rate element and the feature port additive.

12. These "getting started" switch costs do not vary with respect to the number of lines and trunks on the switch or switch usage. The line and usage inputs to SCIS can be changed, but the total "getting started" cost will not vary.¹⁴ The average processor utilizations for BellSouth switches in the five states are *****BEGIN CONFIDENTIAL*****:

¹² This can be calculated from BellSouth's SCIS total investment output report by dividing the total getting started cost by the total switch investment and averaging across the states. The percentage for North Carolina is still under review, but there is no reason to believe that it would be materially different.

¹³ BellSouth then incorrectly assumes that every call type and every feature uses the same number of processor milliseconds in the SST model. See BellSouth's SST Model Methodology Guide (Appendix "C"), page 76.

¹⁴ This can be seen in the office-by-office results in BellSouth's SCIS/MO databases.

	AL	KY	MS	NC ¹⁵	SC
Percent Switch Processor Utilization ¹⁶					

END CONFIDENTIAL

13. At these low levels of processor utilization, the amount of traffic could increase dramatically without exhausting the processors; therefore, using the processor does not have an economic cost because adding calls, minutes, or features causes no additional switch processing costs. Similarly, removing calls, minutes or features from the switch will not result in a decline in processing costs.

14. BellSouth has made a similar error in treating a large cost in 5ESS switches called Equivalent POTS Half Call (EPHC) costs as traffic sensitive. These costs as modeled in SCIS/MO reflect the common equipment costs in the distributed switch architecture component called the switch module. The number of switch modules required in a switch is driven by the number of ports and is not related to usage. BellSouth, however, has misallocated these costs to the usage elements and feature port additive costs.

15. Just as it is imperative that non-recurring costs be recovered via non-recurring rate elements, it is critical that non-traffic sensitive switch costs be recovered via non-traffic sensitive switch rate elements. The common fixed switch costs and EPHC costs are a part of BellSouth's underlying switch cost structure, irrespective of

¹⁵ North Carolina was calculated from BellSouth SCIS/MO inputs (provided by BellSouth in excel spreadsheet format) asking for projected processor utilizations at the end switches' lives. The average could not be obtained from the SCIS/MO output reports as was done for the other four states because the North Carolina SCIS/MO database was based on an outdated and incompatible version of the SCIS/MO program.

¹⁶ Average switch processor utilizations are calculated by the SCIS/MO

usage. The disparity in the way BellSouth attempts to recover its switch costs from CLECs compared to the way it actually incurs costs puts CLECs at a severe disadvantage. CLECs will incur a higher cost for usage than BellSouth incurs because the CLEC's minute-of-use element is inflated by the fixed costs.

16. BellSouth's Application at page 47 refers to Ms. Caldwell's affidavit, para. 111, and seeks to justify its view that these switch costs are traffic sensitive by relying on a Lucent document (not provided) that purportedly shows that the 5ESS switch has capacity constraints in terms of the number of calls depending on type and number of features. Such a letter is not relevant, however, unless the switch is expected to be constrained by calls. As demonstrated in the table of switch processor utilizations above, BellSouth's own data demonstrate that BellSouth's switches are not expected to exhaust on call capacity. If that is the case, then it is irrelevant whether the vendor believes that features can theoretically impact call capacity if that capacity will not be exhausted. The true test of an incremental cost is determining whether a resource will need to be changed (i.e., increased or decreased) in response to changes in demand. BellSouth's citation of the Lucent document does not support its case, and in the absence of other evidence, BellSouth has not demonstrated that the fixed costs it allocates to the usage and feature elements is based on cost-causation principles.

VII. BELLSOUTH'S FEATURE COST METHODOLOGY REFLECTED IN ITS SST MODEL IS FATALLY FLAWED AND PRODUCES FEATURE COSTS THAT HAVE NO RELATIONSHIP TO COSTS INCURRED BY BELLSOUTH.

17. BellSouth's composite feature port additives purportedly represent an average of all vertical features that are provisioned on a subscriber port. This notion is

model outputs from BellSouth's data inputs.

inherently flawed because BellSouth's SST model development methodology mixes feature usage for various classes of service together, such as single line business, residential, multi-line Centrex business, and large PBX-based business customers in an attempt to derive an average cost.¹⁷

18. BellSouth uses the SCIS/MO model outputs as inputs to SST-U, along with the results of BellSouth's feature Hardware Study (discussed below), and makes numerous simplifying assumptions about switch resources consumed by features, to calculate a theoretical cost for a composite of all features. BellSouth's feature costing model development hinges on its ability to estimate various averages relating to the feature and the subscriber line, including:¹⁸

- a) the number of features on an average line
- b) the types of features on an average line
- c) the average number of times the above features are used on an average line
- d) the determination of what constitutes an average line -- single line business, multi-line business, Centrex, residential, PBX trunk, etc.

¹⁷ BellSouth has voluntarily withdrawn its feature port additive in North Carolina that was calculated based on a different model; however, BellSouth's currently proposed rates in North Carolina include \$2.38 for a feature port additive based on the flawed SST model methodology described here.

¹⁸ The average usage is multiplied by the various switch resources used. The most common measure is the number of processor milliseconds (and distributed processor time in the 5ESS switch). BellSouth errs further when it assumes that the same number of processor milliseconds is used for every call type and for every feature (varying only whether it is a DMS switch or a 5E switch). In reality, the number of processor milliseconds differs for every call type (interoffice, intraoffice, originating end, terminating end), as well as for each individual feature (there are hundreds of features that use differing realtimes compared to the 56 features that BellSouth studied).

19. BellSouth reviewed 56 features in order to develop answers to the above questions. BellSouth claims that “[s]tatistics from marketing showed that the typical user utilizes four features” and that the average customer uses 4.5 *feature* calls in the busy hour.¹⁹ This is clearly excessive considering the average user in BellSouth only originates and terminates a total of *****BEGIN CONFIDENTIAL***** *****END CONFIDENTIAL***** busy hour calls.²⁰ Even if the individual feature inputs for the 56 features that BellSouth reviewed were correct, which they are not, BellSouth fails to recognize that arithmetically averaging usage characteristics of 56 individual features does not bear any relationship to feature usage of an average port on a switch. To illustrate, the residential features require busy hour (“BH”) call usage on a per residential line basis, an attendant feature would be the BH call usage on only the attendant line, and multi-line hunting BH call usage is on all the lines in the business multi-line hunt group. Some inputs for these features are determined on a single residential line basis, others are determined on a single business line basis, still others are measured on an attendant line basis, and yet another group is measured on a per business group basis. BellSouth tries to measure Caller ID usage per *line*, Uniform Call Distribution whose input is on a per hunt *group*²¹ basis, and Night Service activations per *attendant*, and then average these

¹⁹ BellSouth Response to DeltaCom’s 1st Request for Production of Documents, Item No. 4, Attachment No. 1 in Georgia Docket No. 14361-U, attached as Exhibit 2.

²⁰ Average busy hour calls are included in the SCIS/MO Input Statistics Report. North Carolina was not included because the SCIS/MO output reports were not available, but the other states showed little variation and it is expected that North Carolina would be similar.

²¹ This is not the only group basis input used – there are multiple features whose inputs are per group.

disparate numbers together to illogically come up with an average usage *of any one of these on a per port basis*.²² Call usages that are per line, per attendant and per group cannot be simply added up and divided by the number of features that BellSouth then assumes is a per port average.

20. BellSouth did not even take into account the usage characteristics based on the penetration ratios of different features. BellSouth provided the penetrations of what appears to be residence-only features that show a variation between .08% to 41.13%.²³ A supplemental response to AT&T's request for feature penetration ratios shows that as of February, 2002, 23 of the 56 features BellSouth reviewed as the foundation for its feature costing model have zero customers. In fact, only 12 features have penetration ratios that exceed one percent. Using the usage and cost characteristics of these 56 features as the basis for developing a composite feature results in a fatally flawed feature cost model producing non-cost-based rates for a composite feature.

21. BellSouth compounds the problem when it incorrectly assumes that both the Lucent and Nortel switches process all feature calls in the central processor. Nortel switches do perform all feature processing in the central processor, but in the Lucent switches the distributed processors provide the bulk of feature processing, and the central processor is rarely involved with features. Thus, BellSouth incorrectly allocates the getting started costs and distributed processing costs (in the form of EPHC costs discussed earlier) to features and minute-of-use rate elements rather than ports, and uses

²² BellSouth Response to DeltaCom's 1st Request for Production of Documents, Item No. 4, Attachment No. 1 in Georgia Docket No. 14361-U, attached as Exhibit 2.

²³ The initial responses to AT&T's First Interrogatories, Interrogatory No. 16, are attached as Exhibit 3. The supplemental responses are attached as Exhibit 4.

incorrect processing times for such costs. Moreover, BellSouth has also included costs for both central and distributed processor costs in the 5ESS that essentially double charges for 5ESS features that do not use the central processors for features. Inflating feature investment with costs that do not exist clearly violates cost causation principles and results in overcharges to CLECs.

22. BellSouth's costs for the feature port additives also include hardware costs that purportedly represent unique hardware required for features. BellSouth's overstatement of these costs is clear TELRIC error. First, the hardware component costs themselves have not been substantiated by BellSouth to reflect net prices it would expect to pay. Second, the unsubstantiated equipment costs are allocated over the purported equipment "capacity," but the capacities assume some level of average utilization that has not been identified or explained. Third, BellSouth has inappropriately averaged together unrelated "capacity" costs of different types of hardware together and assigns the "average" usage of any (or all) features that use hardware times this "average" cost of hardware. BellSouth's methodology results in the implicit, and wrong, assumption that a six-way conference circuit is used just as often as a three-way conference circuit, thus inflating the feature port costs. Furthermore, although BellSouth includes six-way conference circuit costs in the feature hardware study, it is not one of the 56 features BellSouth used to estimate usage, thus resulting in a mismatch of specific feature usage inputs and hardware costs associated with a different set of features. Finally, as shown in the recent Georgia proceeding, much of the feature hardware costs are already included in the basic switch investments. BellSouth did not remove the feature hardware from the switch prices used to generate the port and minute of use

elements. BellSouth is thus seeking to recover these hardware costs twice, once in the port and minute-of-use rate elements and a second time in the features charges.

VIII. BELL SOUTH'S REVISED RATE STRUCTURE FOR ITS FEATURE PORT ADDITIVE IS INAPPROPRIATE AND DOES NOT RESCUE ITS NON COST-BASED RATES.

23. BellSouth's feature cost port additive in Alabama, Mississippi and South Carolina purportedly represent an average of all vertical features of a switch. In their original form, the prices ranged from \$1.98 in Alabama to \$3.04 in South Carolina, but would be applied only to those CLEC subscribers that order one or more features.²⁴ BellSouth has made new SGATs filings that include a revised feature port additive. In the revised form, the feature port additives have been reduced to 55% of their former level, but applied to all CLEC ports with or without features. Reducing the feature port additives to 55% of the former level (purportedly to account for the average usage of features across all ports, not just ports that have one or more features) does not cure the fundamental problem that the original port additive rates are not cost based.

24. Even if the original rates were cost based, BellSouth's implementation of its revised feature rate structure is flawed. The 55% feature "take rate" is unsubstantiated in the Ruscilli and Cox affidavit (para. 19). In Georgia, BellSouth provided data on its feature take rates for 17 features as of September, 2001.²⁵ The highest "take rate" is 41.13% for call waiting basic and deluxe, which has a relatively small cost compared to many of the other features included in BellSouth's

²⁴ BellSouth's current \$2.28 proposed feature port additive in North Carolina is within the range of rates quoted above.

²⁵ This information was provided in response to AT&T's 1st Set of Interrogatories, Item No. 16 in the Georgia Docket No. 17361-U, attached as Exhibit 3.

composite features cost. In supplemental data as of February, 2002,²⁶ BellSouth shows that a feature called Code Restriction and Diversion²⁷ has achieved an incredibly high 55.87% penetration. But the next highest feature is Caller ID at 37.62% followed by 3-way calling at 27.26%, call forwarding busy line at 17.47%, message waiting stutter dial tone at 16.35% and call waiting at 14.91%. BellSouth has provided no documentation or explanation demonstrating that a region-wide take rate of 55% would be appropriate for use in a specific state, nor has BellSouth provided any documentation that the 55% is appropriate region-wide. If an overall feature take rate of 55% were correct (or any other take rate percentage that was state-specific), it would be applicable to the small number of popular features, but not to the higher-priced features included in the BellSouth composite feature such as six-way conference calling or remote call forwarding.²⁸ It is grossly overestimating costs if the take rate of an inexpensive feature such as Caller ID is applied to BellSouth's composite feature cost that demonstrably includes high-priced, little-used features. Most important, however, BellSouth has not demonstrated that

²⁶ BellSouth's Supplemental Response to AT&T's First Interrogatories, Item No. 16, attached as Exhibit 4.

²⁷ Code restriction and diversion blocks calls made to area codes (Numbering Plan Areas "NPAs") the customer has designated, such as 900 calls. It is unclear whether this is a business/residence subscriber feature or a feature assigned to BellSouth's payphones.

²⁸ Attached as Exhibit 5 are the BellSouth individual feature cost estimates produced in North Carolina (excerpted from Proprietary Appendix D North Carolina Docket P-100, Sub 133d, UNE Cost Studies, December 1997, Workbook "features.xls" worksheet "Investments". I have added a column to add the text feature name for the BellSouth numbered feature list. Although I do not agree with the cost levels shown nor was this the exact same process by which BellSouth produced its feature port additive costs in South Carolina, Mississippi and Alabama, it is similar to the SST model used in those states. The individual feature investments illustrate the large variation in costs among features that do occur if BellSouth's methodology that incorporates the arbitrary allocation of switch resources to features is accepted.

applying 55% to its muddled composite rate in any manner reflects the costs that BellSouth incurs for features.

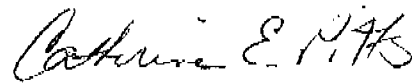
25. When BellSouth refers to additional costs associated with features that are either not currently activated in the switch or features not currently loaded in the switch, it never once mentions that there are any recurring, feature related investments. The Joint Affidavit of John A. Ruscilli and Cynthia K. Cox (para 17) refers only to additional costs such as additional right-to-use fees, programming costs to the manufacturer,²⁹ and internal costs to adapt BellSouth's systems to accept an order. BellSouth has not demonstrated that it has incremental switch investment costs associated with features.

IX. CONCLUSION

26. BellSouth's switch UNE rates suffer from cost structure deficiencies, causing inflated costs due to use of incorrect new switch discounts and new/growth melded discounts. BellSouth's cost model assumptions do not reflect forward-looking trunk termination technology nor a reasonable basic switch network architecture. The revised feature port additive rate structure that takes 55% of the previously approved port additives and adds it to the basic port costs does not remedy the underlying flaws in the feature port additive rate levels. In fact, applying an unsubstantiated 55% "take-rate" for BellSouth's most popular feature(s) to its composite feature cost to develop a new feature rate structure only adds further confusion to a rate that was developed using fatally flawed cost modeling.

²⁹ Apparently, BellSouth is referring to customized features that the switch vendor would have to build or modify existing features to meet the CLEC request.

I declare under penalty of perjury that the facts stated herein are true and correct, to the best of my knowledge, information and belief.

A handwritten signature in cursive script, appearing to read "Catherine E. Pitts".

Catherine E. Pitts

Exhibit 1

New/Replacement Versus Growth Weighting Worksheet:

Cost of Capital: 10.70%
Growth Rate: 3.00%

Year	Anticipated Demand	Incremental Additions	Present Value of Additions	
0	1		1	
1	1.03	0.03	0.0285	
2	1.0609	0.0309	0.0133	0.0133
3	1.092727	0.031827		0.0247
4	1.125508810	0.032781810		0.0230
5	1.159274074	0.033765264		0.0214
6	1.194052297	0.034778222		0.0199
7	1.229873865	0.035821569		0.0185
8	1.266770081	0.036896216		0.0172
9	1.304773184	0.038003102		0.0160
10	1.343916379	0.039143196		0.0149
11	1.384233871	0.040317491		0.0139
12	1.425760887	0.041527016		0.0129
13	1.468533713	0.042772827		0.0120
14	1.512589725	0.044056011		0.0112
15	1.557967417	0.045377692		0.0104

1.041778291 0.229135894

Present Value of Current Demand: 1.041778291

Present Value of Future Growth: 0.229135894

Replacement Weighting 82.0%

Growth Weighting 18.0%

Exhibit 2

BellSouth Telecommunications, Inc.
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125 Perimeter Center West
Suite 378
Atlanta, GA 30346

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Meredith E. Mays
Attorney

770 391 4254
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November 28, 2001

DELIVERED BY HAND

Mr. Reece McAlister
Executive Secretary
Georgia Public Service Commission
244 Washington Street, S.W.
Atlanta, GA 30334-5701

Re: *Review of Cost Studies, Methodologies, and Cost-Based Rates for
Interconnection and Unbundling of BellSouth Telecommunications, Inc.'s
Services; Docket No. 14361-U*

Dear Mr. McAlister:

Enclosed please find the original and five (5) copies, as well as an electronic version, of BellSouth Telecommunications, Inc.'s Responses to ITC/DeltaCom Communications, Inc.'s First Interrogatories and First Requests for Production of Documents in the above-referenced docket. I would appreciate your filing same and returning the three (3) extra copies stamped "filed" in the enclosed self-addressed and stamped envelopes.

Thank you for your assistance in this regard.

Yours very truly,


Meredith E. Mays

MEM:nvd
Enclosures

cc: David I. Adelman, Esquire

422137/418372/418375

BellSouth Telecommunications Inc.
Georgia Docket No. 14361-U
DeltaCom's 1st Request for Production
October 29, 2001
Item No. 4
Attachment No. 1

Development of Feature Usage Inputs

In previous proceedings, several parties have asserted that the switch provides "over 1,000" features based on the capability of Telecordia's model. However, they have failed to admit that:

- 1) The same feature may appear numerous times in different classes of service, e.g. residence, small business, Centrex, attendant, p-phone, ISDN. This is the same functionality; the switch resources required to process the call are identical regardless of the class of service.
- 2) The same feature may appear both on a flat rate and usage sensitive basis. Thus, it is counted twice.
- 3) Ports are counted in the list. These are considered as individual elements, not features.
- 4) Trunk-side features are considered. We are only considering line-side functionality.
- 5) Feature Group A,B,C and D capabilities are counted.
- 6) E911 capabilities are included.

After distilling the feature list to unique functions, the switch in reality provides approximately 200 features.

In order to obtain average usage data, 56 features (over 20% of the unique switch features) were reviewed. These features were analyzed as to which switch resources were required to process the feature call; processor, line, hardware, and/or SS7. Inputs into BellSouth's retail studies (busy hour calls) were then input into a matrix. This allowed the development of an average call demand by type of switch resource required. The next step was to consider the number of features an average user would utilize. Statistics from marketing showed that the typical user utilizes 4 features from an extensive list.

The calculations are displayed in the following chart.

Average Busy Hour Call Demand by Type of Switch Resource

#	Feature	Processor	Line	Hardware	SS ⁷
1	3-way Calling	0.5		0.5	
2	CF Variable	0.3	0.3		
3	Speed calling	1	1		
4	Speed calling (2)	1	1		
5	CW	0.3	0.3	0.5	
6	RACF	0.04	0.04	0.04	
7	Cancel CW	0.1	0.1		
8	Automatic Callback	1.5	1.5	1.5	1.5
9	Automatic Recall	0.5	0.5	0.5	0.5
10	Caller ID - Basic (Number, only)	1.6	1.6		
11	Calling Number Delivery Blocking	0.13	0.13		
12	Distinctive Ringing	1.25	1.25	1.25	1.25
13	COT	0.01	0.01	0.01	
14	Selective Call Rejection	0.8	0.8	0.8	
15	Selective Call Forwarding	0.02	0.02	0.02	0.02
16	Selective Call Acceptance	0.4	0.4	0.4	0.4
17	MLH	6			
18	CFBL	0.4			
19	CFDA	0.4			
20	RCF	0.1			
21	CT	0.25		0.25	
22	Speed Calling	1	1		
23	Manual Line Service	0.4			
24	Distinctive Ringing	1			
25	CH	0.2			
26	Semi-restricted	0.02			
27	Toll Restricted	0.02	0.02		
28	Call Pick-up	0.13	0.13		
29	Directed Call Pick-up (w/bergo-in)	0.19	0.19		
30	Directed Call Pick-up (w/o bergo-in)	0.5	0.5		

Average Busy Hour Call Demand by Type of Switch Resource (Continued)

#	Feature	Processor	Line	Hardware	SS7
31	Trunk Answer	0.6	0.6		
32	Message Detail Recording	1	1	1	
33	Fixed Night Service	2		2	
34	An'd Camp-on	1		1	
35	CW Lamps	5		5	
36	Fixed Night Service - CF	2			
37	An'd ID	1			
38	An'd Conference	0.5	0.5	0.5	
39	UCD	10.8			
40	Queuing	1.2			
41	ARS	3.33			
42	Deluxe ARS	4.41	4.41		
43	SFGs	0.35			
44	Selective Control of Facilities	1.47	1.47	1.47	
45	Facility Restriction Level	1			
46	MWI	0.45			
47	ACR	0.2	0.2		
48	Calling Name/Number Delivery	1.6		1.6	1.6
49	Dial CW	0.2	0.2		
50	Teen Service	1.25			
51	Voice/Data Protection	0.1	0.1		
52	Code Restriction	0.05	0.05		
53	Call Park	0.28			
54	Selective Class of Call Screening	1.47	1.47		
55	Star 98 Access to Voice Mail	1	1		
56	CW Deluxe	0.3		0.3	
57	Average	1.1	0.9	1.0	0.9
58	Count	36	31	19	6
59	Average Number of Features per Line	4	2.2	1.4	0.4
60	Usage per Line	4.5	1.6	1.3	0.4

Exhibit 3

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AWO
Meredith E. Mays
State Operations Counsel

404 986 1720
Fax 404 986 1800

January 25, 2002

Suzanne W. Ockleberry, Esquire
AT&T Communications of the
Southern States, LLC
1200 Peachtree Street, N.E.
Suite 8100
Atlanta, Georgia 30309

Re: *Review of Cost Studies, Methodologies, and Cost-Based Rates for
Interconnection and Unbundling of BellSouth Telecommunications, Inc.'s
Services*; Docket No. 14361-U

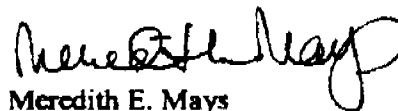
Dear Suzy:

This letter is in response to your recent e-mail regarding BellSouth's responses to Interrogatories 1 and 2 of AT&T's First Set of Interrogatories. Your e-mail stated: "In response to Interrogatory No. 1, BellSouth indicated that for YET 2001, the amount in Account 2690 was \$63,779,447 as of August. However in response to Interrogatory No. 2 . . . the account balance exceeds \$198,000 for the same time period. Is there an error or typo. If not, could you clarify why BellSouth provided different amounts for the same account for the same time period."

In response to Interrogatory No. 1, BellSouth provided the annual increments of BellSouth capitalized software costs. In response to Interrogatory No. 2, BellSouth provided the amounts in account 2690 by account balance. There is not an error or typo in BellSouth's discovery responses. If you sum the annual incremental costs in BellSouth's response to Interrogatory No. 1, the total is \$198,892,215, which is the same total you get by summing the account balances in BellSouth's response to Interrogatory No. 2.

I trust that this letter resolves your concern.

Yours very truly,


Meredith E. Mays

MEM:nvd

30698

BellSouth Telecommunications, Inc.
Georgia Docket No. 14361-U
AT&T's 1st Set of Interrogatories
October 3, 2001
Item No. 16
Page 1 of 1

REQUEST: Please provide penetration ratios (percent of total switched lines)
for each feature offered by BellSouth.

RESPONSE: Penetration ratios are based on September 2001 actuals.

TOTAL SPEED 8	8.25%
TOTAL CALL FORWARD	15.32%
TOTAL SPEED 30	6.80%
TOTAL 3 WAY CALLING	27.61%
TOTAL CALL WAITING DELUXE	25.18%
TOTAL FLEXIBLE CF & REMOTE ACCESS CF	2.61%
TOTAL CALLER ID BASIC & DELUXE	36.46%
TOTAL CALL WAITING BASIC & DELUXE	41.13%
TOTAL REMOTE CALL FORWARDING	1.16%
TOTAL RINGMASTER	4.61%
TOTAL ANON CALL REJECTION	0.06%
TOTAL CALL BLOCK	14.45%
TOTAL CALL RETURN	27.38%
TOTAL CALL SELECT	6.57%
TOTAL CALL TRACE	9.71%
TOTAL REPEAT DIAL	14.26%
TOTAL PREF CALL FORWARD	1.28%

Exhibit 4

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APR 2002

Meredith E. Mays
State Operations Counsel

404 986 1720
Fax 404 986 1800

March 29, 2002

DELIVERED BY HAND

Mr. Reece McAlister
Executive Secretary
Georgia Public Service Commission
244 Washington Street, S.W.
Atlanta, GA 30334-5701

Re: *Review of Cost Studies, Methodologies, Pricing Policies, and Cost-Based Rates
for Interconnection and Unbundling of BellSouth Telecommunications, Inc.'s
Services; Docket No. 14361-U*

Dear Mr. McAlister:

Enclosed please find the original and five (5) copies, as well as an electronic version, of BellSouth Telecommunications, Inc.'s Supplemental Response to AT&T Communications of the Southern States, Inc.'s First Interrogatories in the above-referenced docket. I would appreciate your filing same and returning the three (3) extra copies stamped "filed" in the enclosed self-addressed and stamped envelopes.

Thank you for your assistance in this regard.

Yours very truly,


Meredith E. Mays

MEM:nvd
Enclosures

440541/433403

**BEFORE THE
GEORGIA PUBLIC SERVICE COMMISSION**

In Re:)	
)	
Generic Proceeding to Review Cost Studies,)	Docket No. 14361-U
Methodologies, Pricing Policies and Cost-)	
Based Rates for Interconnection and Unbundling)	
of BellSouth Telecommunications, Inc.'s)	
Network)	

**BELLSOUTH TELECOMMUNICATIONS, INC.'S
SUPPLEMENTAL RESPONSE TO
AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC.'S
FIRST INTERROGATORIES**

BellSouth Telecommunications, Inc. ("BellSouth") respectfully submits the following Supplemental Response to the First Interrogatories filed by AT&T Communications of the Southern States, Inc.'s ("AT&T") on October 3, 2001. This response amends BellSouth's responses filed on October 18, 2001.

INTERROGATORY NO. 16:

Please provide penetration ratios (percent of total switched lines) for each feature offered by BellSouth.

SUPPLEMENTAL RESPONSE:

BellSouth objects to this response to the extent that it is unduly burdensome and overly oppressive in that BellSouth does not maintain penetration ratios for each and every feature offered to its customers in the normal course and scope of business. BellSouth previously provided AT&T with the penetration ratios maintained in the normal course and scope of business based on September 2001 data. Providing AT&T with additional information is unduly burdensome and is not reasonably calculated to the lead to the discovery of admissible evidence in that the feature cost (Element B.4.13) is a composite feature cost, which includes all features. The data inputs to the composite feature cost represent the entire range of features. Moreover, the feature cost is based on busy hour usage. The actual penetration ratio of the features offered by BellSouth provides no additional information relating to cost, and the penetration ratio does not relate to the actual busy hour usage of those features and the resulting impact on switch resources.

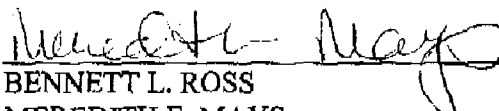
Subject to, and without waiving the foregoing objections, responsive information is included. This information consists of: (1) a list of the 56 features that were actually reviewed to obtain average switch usage data as part of the cost study in this docket; and (2) penetration ratios for the features listed based on February 2002 data.

FEATURE	PENETRATION RATIO
1. Three-Way Calling	27.26%
2. Call Forwarding Variable-BBG	15.27%
3. Customer Changeable Speed Calling – 1 digit	8.14%
4. Customer Changeable Speed Calling – 2 digits	6.96%
5. Call Waiting	14.91%
6. Remote Activation of Call Forwarding	2.21%
7. Cancel Call Waiting	0.00%
8. Automatic Callback	0.00%
9. Automatic Recall	14.82%
10. Calling Number Delivery (Caller ID)	0.45%
11. Calling Number Delivery Blocking	0.27%
12. ACD Distinctive Ringing	0.06%
13. Customer Originated Trace	10.22%
14. Selective Call Rejection	15.07%
15. Selective Call Forwarding	1.39%
16. Selective Call Acceptance	0.00%
17. Multiline Hunt Service	6.44%
18. Call Forwarding Busy Line	17.47%
19. Call Forwarding Don't Answer All Calls	5.45%
20. Remote Call Forwarding	0.18%
21. Call Transfer Outside	0.00%
22. Speed Calling Individual - 2 digits	0.01%
23. Manual Line Service	0.00%
24. ACD Distinctive Ringing	0.01%
25. Call Hold	0.70%
26. Semi-Restricted (Orig. and Term.)	0.00%
27. Toll Restricted Service	0.49%
28. Call Pick-Up	0.60%
29. Directed Call Pick-Up with Barge-In	0.01%
30. Directed Call Pick-Up without Barge-In	0.09%
31. Trunk Answer Any Station	0.00%
32. MDR of Private Facility Calls via RAO	0.00%
33. Fixed Night Service –Key	0.00%
34. Att'd Camp-On (Nondata Link Console)	0.00%
35. Call Waiting Lamps for Queue Groups	0.00%
36. Fixed Night Service – Call Forwarding	0.00%

37. Att'd Busy Line Verification	0.00%
38. Att'd Conference	0.00%
39. Uniform Call Distribution	0.00%
40. Query Busy Station	0.00%
41. Automatic Route Selection	0.07%
42. Deluxe Automatic Route Selection	0.02%
43. SFGs for In and Out Calls	0.00%
44. Selective Control of Facilities	0.00%
45. Facility Restriction Level	0.00%
46. Msg.Waiting Indic. - Stutter Dial Tone	16.35%
47. Anonymous Call Rejection	0.08%
48. Caller ID Deluxe (Name and Number Delivery)	37.62%
49. Dial Call Waiting	0.00%
50. Teen Service (Res. Dist. Alerting Svc.)	5.60%
51. Voice/Data Protection	0.01%
52. Code Restriction and Diversion	55.87%
53. Call Park	0.00%
54. Selective Class of Call Screening	0.49%
55. Star98 Access	0.00%
56. Call Waiting Deluxe	0.00%

Respectfully submitted, this 29th day of March, 2002.

BELLSOUTH TELECOMMUNICATIONS, INC.


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CERTIFICATE OF SERVICE

This is to certify that I have this day served a copy of the foregoing, upon known counsel of record, via United States Mail, addressed as follows:

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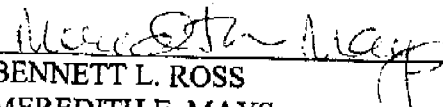
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This 29th day of March, 2002.

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*via electronic mail and U. S. Mail

433403

Exhibit 5
Confidential
Not for Public Inspection

TAB F

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
)
)

Application of BellSouth Corporation,)
Pursuant to Section 271 of the)
Telecommunications Act of 1996)
To Provide In-Region, InterLATA)
Services In Alabama, Kentucky,)
Mississippi, North Carolina and South)
Carolina)
_____)

WC Docket No. 02-150

DECLARATION OF STEVEN E. TURNER
ON BEHALF OF AT&T CORP.

I. INTRODUCTION AND QUALIFICATIONS

1. My name is Steven E. Turner. Currently, I head my own telecommunications and financial consulting firm, Kaleo Consulting.

2. I hold a Bachelor of Science degree in Electrical Engineering from Auburn University in Auburn, Alabama. I also hold a Masters of Business Administration in Finance from Georgia State University in Atlanta, Georgia.

3. From 1986 through 1987, I was employed by General Electric in their Advanced Technologies Department as a Research Engineer developing high-speed graphics simulators. I joined AT&T in 1987 and, during my career there, held a variety of engineering, operations, and management positions. These positions covered the switching, transport, and signaling disciplines within AT&T. From 1995 until 1997, I worked in the Local Infrastructure and Access Management organization within AT&T. It was during this tenure that I became familiar

with the many regulatory issues relating to AT&T's local market entry, and specifically with the issues regarding the unbundling of incumbent local exchange company ("ILEC") networks.

4. I formed Kaleo Consulting in January 1997. I consult primarily on regulatory issues related to facilities-based entry into local exchange service and, using financial models, advise companies on how and where to enter telecommunications markets.

5. I have filed testimony or appeared before commissions in the states of Alabama, Arkansas, California, Colorado, Delaware, Georgia, Florida, Hawaii, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Texas, Washington, and Wisconsin. Additionally, I filed testimony with the Federal Communications Commission ("FCC") regarding BellSouth's and Southwestern Bell Telephone Company's ("SWBT") compliance with Section 271 of the Telecommunications Act of 1996 (the "Act").

II. PURPOSE AND SUMMARY OF AFFIDAVIT

6. The purpose of my affidavit is to demonstrate that BellSouth's Daily Usage Feed (DUF) rates for Alabama, Kentucky, Mississippi, North Carolina, and South Carolina are vastly inflated above TELRIC levels.

7. There is no question that BellSouth's North Carolina DUF rates do not even approximate cost-based levels. BellSouth processes DUF messages for all of the states in its region in centralized facilities. DUF rates should equal the cost of these facilities divided by the total number of DUF rates processed in these facilities (for all states). Accordingly, there should be little if any difference in the DUF rates from state-to-state within BellSouth's region. Yet, BellSouth's North Carolina DUF rates are as much as *seven times* higher than BellSouth's DUF rates in Alabama, Kentucky, Mississippi and South Carolina.

8. BellSouth has effectively conceded that its North Carolina DUF rates are inflated above TELRIC-levels. In an ongoing UNE rate proceeding in North Carolina, BellSouth has proposed rates that are substantially lower than those currently in effect. Unfortunately, there is no true-up mechanism in the North Carolina UNE rate proceeding and, as a result, there is no means by which CLECs can recover the current DUF overcharges.

9. BellSouth's DUF rates in Alabama, Kentucky, Mississippi, and South Carolina also are inflated above TELRIC levels. The DUF rates in those four states are based on the same cost study and, as demonstrated below, that cost study is riddled with clear TELRIC errors

10. First, the BellSouth DUF cost study inflates per record DUF rates by disproportionately allocating DUF processing cost solely to CLEC messages that should be borne by all messages including those of BellSouth. BellSouth produces DUF records for CLECs and similar DUF-type records for its own billing organization. Accordingly, a properly computed per record DUF rate should equal the total cost of producing all DUF records (both for CLECs and for BellSouth) divided by the total number of DUF records (again, both for CLECs and for BellSouth). Yet, BellSouth's DUF rates arbitrarily allocate costs to CLECs and their messages that should be borne across all messages including those of BellSouth. In short, BellSouth completely fails to account for the "total demand" aspect of TELRIC in its DUF studies. As a result of this clear error, CLECs are forced to pay inflated costs of producing DUF records – costs that should be shared by BellSouth if a proper TELRIC study was conducted.

11. Second, BellSouth's DUF cost study uses inconsistent – and in some cases inappropriate – cost recovery periods. There are three types of DUF records: ADUF, ODUF and EODUF. BellSouth uses a ten year cost recovery period for the ADUF rate elements, but only a three year cost recovery period for the ODUF and EODUF rate elements. It makes no sense for

BellSouth to use different recovery periods for different types of DUF rates because they are produced using many of the same facilities. In any event, the proper cost recovery period for 460C assets – the asset class where BellSouth places DUF systems development work – is five years,¹ which is the period BellSouth should have used to amortize the investments in the systems.

12. Third, BellSouth's DUF cost study contains several mathematical errors. Those errors overstate DUF rates and often result in multiple recovery (sometimes up to five times) of DUF related investments.

13. Fourth, BellSouth's DUF cost study allows BellSouth to recover certain system development expenses as an annual expense, rather than capitalizing those expenses. And even if it were appropriate to recover system development expenses as an annual expense, BellSouth uses an inappropriate recovery period of three years. As demonstrated below, a proper recovery period for DUF investment expenses is five years.

14. Fifth, BellSouth's cost study allows BellSouth to recover the cost of magnetic tape message delivery in its DUF processing charge, even when customers order an electronic feed and do not require magnetic tape.

15. Sixth, BellSouth's cost study significantly understates the number of CLEC DUF messages for both the ADUF and ODUF categories due to: (1) errors in identifying the starting

¹ See BellSouth Telecommunications, Inc., Alabama SGAT Cost Study, August 2001 (hereafter referred to as "Alabama SGAT Cost Study"), "Capcalc.dbf" Database, "Annual Charge Factors" Table, BellSouth Joint Alabama, Kentucky, Mississippi, North Carolina, and South Carolina Section 271 Application, Appendix D, Kentucky Case No. 382, Response of BellSouth to Staff's First Data Request Dated 05/31/01, Item 10(b), Supplemental Response No. 3, 06/14/01 (hereafter referred to as "Kentucky SGAT Cost Study"), "Capcalc.dbf" Database, "Annual Charge Factors" Table, BellSouth Telecommunications, Inc., Mississippi SGAT Cost Study, August 2001 (hereafter referred to as "Mississippi SGAT Cost Study"), "Capcalc.dbf" Database, "Annual Charge Factors" Table, and BellSouth Telecommunications, Inc., South Carolina SGAT Cost Study, August 2001 (hereafter referred to as "South Carolina SGAT Cost Study"), "Capcalc.dbf" Database, "Annual Charge Factors" Table.

level of messages for these message counts; and (2) underestimation of the growth rate in the messages. BellSouth's own data clearly demonstrate a much greater growth rate of messages than what BellSouth has included in the cost study. A related problem in forecasting is that while BellSouth has understated the growth in number of messages, BellSouth has overstated the growth rate in the number of CLECs participating in the UNE-P market. Again, BellSouth's own data demonstrate the error in BellSouth's estimates.

16. As a result of these fundamental errors, BellSouth's DUF rates in Alabama, Kentucky, Mississippi, North Carolina, and South Carolina are all inflated far above the level that any reasonable application of TELRIC principles would produce. Based on my analysis of BellSouth's DUF cost studies, BellSouth's DUF monthly per line cost is several times too high.

III. BELLSOUTH'S NORTH CAROLINA DUF RATES ARE NOT TELRIC COMPLIANT.

17. Four of the states in BellSouth's Application have similar DUF rates – *i.e.*, Alabama, Kentucky, Mississippi, and South Carolina. The DUF rates for these states are based on the same cost study, and the small differences in the DUF rates among these states reflect slight differences in cost factors between the states.

18. BellSouth's North Carolina DUF rates are not based on the same cost study used to develop BellSouth's DUF rates in the other four states. The ADUF rates that appear in BellSouth's North Carolina SGAT are as much as *seven times* higher than the ADUF rates in BellSouth's other states. BellSouth's current North Carolina SGAT does not include any ODUF rates. It would therefore appear that BellSouth's prior ODUF rates are still in effect. BellSouth's prior ODUF rates in North Carolina are 28% higher than the ODUF rates in BellSouth's other states.

19. The table below summarizes the DUF rates in each of the applicant states.

	Alabama	Kentucky	Mississippi	North Carolina	South Carolina
ADUF-Message Processing	\$0.001851	\$0.001857	\$0.001861	\$0.014350	\$0.001856
ADUF-Data Transmission	\$0.00011300	\$0.00012447	\$0.00012278	\$0.00012770	\$0.00012515
ODUF-Message Processing	\$0.002499	\$0.002506	\$0.002509	\$0.003200 ²	\$0.002508
ODUF-Data Transmission	\$0.00009400	\$0.00010372	\$0.00010232	\$0.00004000 ³	\$0.00010429

20. There can be no legitimate justification for these large rate differences. The reality is that BellSouth processes all DUF messages in one center in Birmingham, Alabama. BellSouth's own data demonstrate the consistency of DUF rates in Alabama, Kentucky, Mississippi, and South Carolina, and the inconsistency of these rates with the rates in North Carolina. While there is virtually no difference in the rates for ADUF-Message Processing in Alabama, Kentucky, Mississippi and South Carolina, ADUF-Message Processing in North Carolina costs *7.73 times more* than the average rate for these four states. While there is virtually no difference in the rates for ODUF-Message Processing for Alabama, Kentucky, Mississippi, and South Carolina North Carolina's ODUF rate is 28 percent higher than the rates in the remaining four states. The bottom line is that the rates BellSouth has put forward in its SGAT for North Carolina are incomplete (in failing to provide for ODUF) and inconsistent with TELRIC principles.

21. BellSouth has effectively conceded that its North Carolina DUF rates are not TELRIC compliant. In the current North Carolina cost proceeding, BellSouth has proposed rates

² In light of BellSouth's failure to provide ODUF rates in its North Carolina SGAT, that ODUF rate is taken from the AT&T-BellSouth Interconnection Agreement for North Carolina.

³ *Id.*

for DUF that are consistent with its much lower DUF rates in Alabama, Kentucky, Mississippi and North Carolina. These rates are summarized in the table below:⁴

	North Carolina Cost Docket
ADUF-Message Processing	\$0.001846
ADUF-Data Transmission	\$0.00013485
EODUF-Message Processing	\$0.234524
ODUF-Recording	\$0.0000213
ODUF-Message Processing	\$0.002490
ODUF-Data Transmission	\$0.00011237

22. The proposed North Carolina DUF rates have not been examined by the North Carolina Commission, and are not currently in effect. Moreover, there is no true-up mechanism in the North Carolina UNE rate proceeding. As a result, there are no means by which CLECs can recover overcharges paid to BellSouth for its non-TELRIC compliant rates. BellSouth is seeking Section 271 approval for North Carolina based on its current DUF rate. Yet it cannot begin to show that its North Carolina DUF rate complies with TELRIC principles.

IV. BELLSOUTH'S DUF COST STUDIES CONTAIN NUMEROUS CLEAR TELRIC ERRORS.

23. As noted above, BellSouth's DUF rates in Alabama, Kentucky, Mississippi and South Carolina are all based on the same cost study. While that cost study produces reasonably consistent rates among the four states, the study contains numerous clear TELRIC errors that substantially inflate BellSouth's DUF rates in each of those states. The table below summarizes these rate differences.

	TELRIC- Compliant Rate	Alabama SGAT	Kentucky SGAT	Mississippi SGAT	South Carolina SGAT
ADUF-Message Processing	\$0.000089	\$0.001851	\$0.001857	\$0.001861	\$0.001856
ADUF-Data Transmission	\$0.00012654	\$0.00011300	\$0.00012447	\$0.00012278	\$0.00012515

⁴ BellSouth Telecommunications, Inc., Direct Testimony of Daonne Caldwell, Before the North Carolina Utilities Commission, Docket No. P-100, SUB133D, June 10, 2002, Caldwell Exhibit DDC-2, Unbundled Network Element Cost Studies Executive Summary, p. 26.

ODUF-Message Processing	\$0.000251	\$0.002499	\$0.002506	\$0.002509	\$0.002508
ODUF-Data Transmission	\$0.00010545	\$0.00009400	\$0.00010372	\$0.00010232	\$0.00010429

24. Applying reasonable usage assumptions to these rates shows the per line monthly impact of these rate differences.

	TELRIC-Compliant Rate ⁵	Alabama SGAT	Kentucky SGAT	Mississippi SGAT	South Carolina SGAT
DUF Monthly Per Line Cost	\$0.14	\$1.20	\$1.17	\$0.98	\$1.02

25. Thus, the combined effect of the TELRIC errors in BellSouth's DUF cost study causes, on average, a seven-fold overstatement of BellSouth's per line monthly DUF charge in Alabama, Kentucky, Mississippi, and South Carolina. The clear TELRIC errors responsible for this substantial rate inflation are straight-forward.

A. Distribution of Costs Across All Messages

26. The BellSouth Billing Inc. organization ("BBI") is responsible for processing all messages generated within BellSouth's network, including DUF messages generated for CLEC use and those messages generated for BellSouth's use. According to Daonne Caldwell (a BellSouth witness in this proceeding), BellSouth does not refer to its own messages as DUF messages, even though such messages are used for the same purpose as CLEC DUF messages.⁶

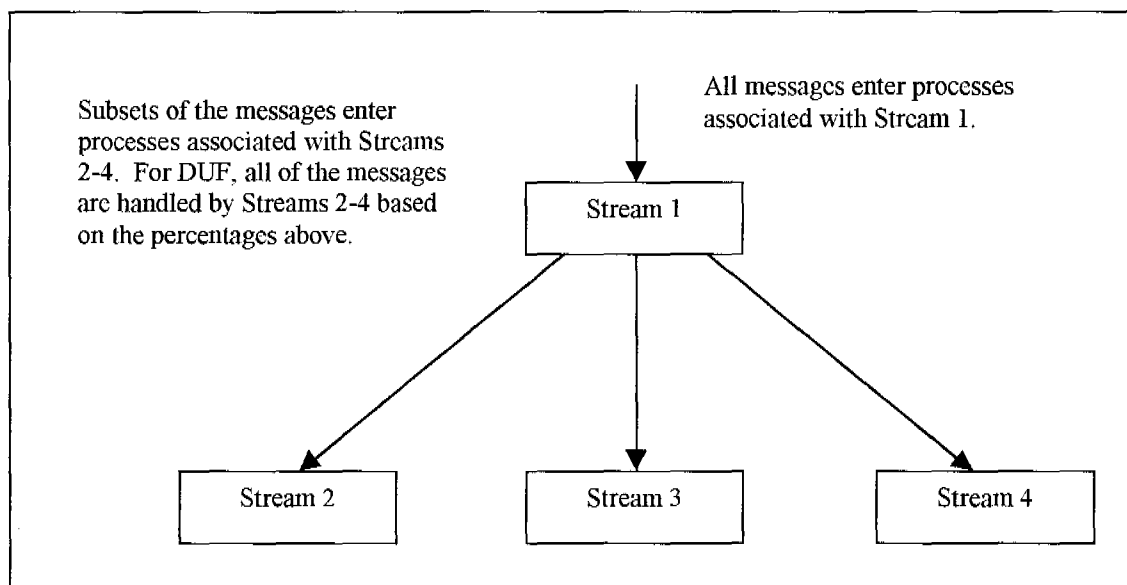
⁵ For the purposes of this table, the demand characteristics used for the TELRIC-Compliant Rate column reflect the average for Alabama, Kentucky, Mississippi, and South Carolina. Correcting for the clear TELRIC errors in BellSouth's cost study (discussed below) results in DUF rates per line in each state of \$0.16, \$0.15, \$0.13 and \$0.13 respectively, which are substantially lower than the DUF rates in BellSouth's current SGAT.

⁶ Deposition of Daonne Caldwell, Before the Public Service Commission, *In Re: Generic Proceeding to Review Cost Studies, Methodologies, Pricing Policies and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications, Inc.'s Network*, Docket No. 14361-U, March 19, 2002, (hereafter referred to as "Caldwell Deposition") 52:13-53:24.

27. Based on information from BellSouth cost studies,⁷ messages processed by the BBI are broken into four “streams.” Stream 1 has processing activities that apply to all of the messages that enter into the BBI. Stream 2, Stream 3, and Stream 4 each contain processes that handle subsets of the total Stream 1 messages. According to the BellSouth cost studies,

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END CONFIDENTIAL*** of the messages pass through Stream 2, Stream 3, and Stream 4, respectively.⁸ The following chart illustrates how the process operates.



⁷ There is not a lot of information available in BellSouth’s cost filings regarding BBI’s processing of DUF messages. Moreover, in a Georgia cost proceeding Ms. Caldwell, BellSouth’s designated expert on DUF message cost, was unable to answer specific questions about the development of the DUF cost study or BBI’s processing of messages used in the study. See, generally, Caldwell Deposition, 51-52, 57, 60-61, 69, 73-74, 84-85, and 106.

⁸ See Alabama SGAT Cost Study, “ODUF.xls” Workbook, “WP2” Worksheet, Cells F31, F33, F35, and F37 (taken to two significant digits), Kentucky SGAT Cost Study, “ODUF.xls” Workbook, “WP2” Worksheet, Cells F31, F33, F35, and F37 (taken to two significant digits), Mississippi SGAT Cost Study, “ODUF.xls” Workbook, “WP2” Worksheet, Cells F31, F33, F35, and F37 (taken to two significant digits), and South Carolina SGAT Cost Study, “ODUF.xls” Workbook, “WP2” Worksheet, Cells F31, F33, F35, and F37 (taken to two significant digits).

The chart shows that each message is processed by Stream 1 and then will be processed by Stream 2, Stream 3, or Stream 4, depending on the type and characteristics of the message, which are not defined in the cost study.

28. The fundamental costing problem is that BellSouth fails to consider total demand in developing DUF costs. The majority of the components in the DUF costs should be based on the Stream 1 volumes representing *all* DUF messages – for both CLECs and BellSouth – which is 11.4 billion messages per month. The remaining DUF costs should then be based on the CLEC specific processes associated with CLEC DUF messages. BellSouth does not consider all messages in developing DUF costs, however. Instead, it separates the DUF messages into the various Streams and processes and then arbitrarily allocates disproportionate CLEC DUF costs divided by the smaller CLEC portion of the Stream volumes, which serves to inflate CLEC DUF costs.

29. It may be helpful to illustrate the problems with BellSouth's costing approach that makes an arbitrary allocation of cost to system processes supporting these data streams. BellSouth has allocated certain labor costs to the six data processes associated with Stream 3 and then assumed that *every* ODUF message must bear the costs of these six processes regardless of whether the DUF message requires each process or not. Moreover, the amounts of time that BellSouth has allocated to these processes bear no correlation to the volume of messages being evaluated within those processes. For instance, the MF02A01 process handles *****BEGIN**
CONFIDENTIAL **END CONFIDENTIAL***** million messages per month in Stream 3, and BellSouth has attributed *****BEGIN CONFIDENTIAL** **END CONFIDENTIAL*****

hours of labor to this systems process per month.⁹ However, the MF02A30 process handles

BEGIN **CONFIDENTIAL** END **CONFIDENTIAL** million message per month in

Stream 3 and BellSouth has attributed ***BEGIN **CONFIDENTIAL** **END**

CONFIDENTIAL*** hours of labor to this systems process per month.¹⁰ In short, the

MFA02A01 process, used almost exclusively by BellSouth, handles 50 times more messages

than the MF02A30 process, used almost exclusively by CLECs, and yet BellSouth has attributed

the same labor to each process. As a result, for these two similar processes, CLECs bear 50

times more cost on a per message basis than BellSouth. Clearly, given the number of messages

that are being processed by the BBI each month – more than 11.4 billion – all message

processing is automated, and the labor costs for such processing must be spread proportionally

among all messages. Although it is reasonable to allocate to CLECs the costs directly

attributable to processing of CLEC DUF messages, allocating on a per message basis 50 times

more cost to the CLEC process than to the BellSouth process is arbitrary and violates TELRIC

principles.¹¹

⁹ See Alabama SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell H97 for the message count and Cells H90, H91, and H92 for the labor hours, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell H97 for the message count and Cells H90, H91, and H92 for the labor hours, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell H97 for the message count and Cells H90, H91, and H92 for the labor hours, and South Carolina SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell H97 for the message count and Cells H90, H91, and H92 for the labor hours.

¹⁰ See Alabama SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell F107 for the message count and Cells H99, H100 (applied to JG58 Monthly Labor Hours), and H101 for the labor hours, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell F107 for the message count and Cells H99, H100 (applied to JG58 Monthly Labor Hours), and H101 for the labor hours, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell F107 for the message count and Cells H99, H100 (applied to JG58 Monthly Labor Hours), and H101 for the labor hours, and South Carolina SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell F107 for the message count and Cells H99, H100 (applied to JG58 Monthly Labor Hours), and H101 for the labor hours.

¹¹ For the labor associated with processing messages, the appropriate approach would be to determine the total labor involved across the BBI and spread that labor cost across the total incoming messages (QA01) that the BBI processes.

30. As the discussion above makes clear, the primary problem is that BellSouth fails to include the appropriate number of messages in the denominator in calculating DUF costs. The second problem – allocation -- does not turn on whether BellSouth has overstated the numerator – the labor hours that BellSouth has assumed to be expended by the BBI – or understated the denominator – the number of messages that are processed by the BBI. The allocation problem is that BellSouth is arbitrarily allocates a disproportionately high number of labor hours to CLEC DUF messages and then divides these labor hours by the small volume of CLEC DUF messages. In this way, BellSouth artificially inflates the CLEC's cost for DUF considerably above that which the level BellSouth itself bears to perform the same work for its DUF messages. This understatement in the denominator by failing to use total DUF messages and the artificial allocation of cost that BellSouth proposes causes CLECs to bear, as in the example above, 50 times more cost per message than BellSouth. This approach is not consistent with the "total demand" aspect of TELRIC and is a clear TELRIC violation.

B. Arbitrary Cost Recovery Periods

31. In violation of TELRIC principles, BellSouth uses different and conflicting cost recovery periods to develop its cost estimates. In the case of ADUF, BellSouth developed its cost estimate for the system development investment and spread the cost across the anticipated demand over a 10-year period. In the case of ODUF and EODUF, BellSouth developed its cost estimate for the system development investment and spread the cost across the anticipated demand over a three-year period. In the Georgia UNE cost proceeding, Ms. Caldwell was candid in explaining the basis for BellSouth's decisions regarding the cost recovery period. Simply put, the ADUF costs were so high that a longer recovery period was used than for other DUF costs.

Q. Is there a reason why different projection time periods were used?

- A. Yes. When the very first ADUF study was done, which was, you know we mentioned earlier that it would have been back in the 7061-U or else that 14361-U, it was determined that there was like an extreme large amount of development costs that was greater than on the other files. So in order to get a more reasonable recovery period for that we spread it out over a longer time frame, and on the other studies the demand did not indicate that we would need to do that.¹²

This approach simply is not cost-based and fails to comply with TELRIC principles.

32. BellSouth places DUF system development costs in the 460C asset class.¹³

According to BellSouth's cost filing, assets in the 460C class have an economic life of 5.0 years.¹⁴ This is a non-arbitrary determination of the life of assets in this asset class. Having made that determination, however, BellSouth cannot then use a three-year period in the ODUF cost study and a 10-year period in the ADUF cost study and then amortize the investment over a five year period. To be consistent with TELRIC, BellSouth must use the same cost recovery period over which it amortizes the investment.

C. System Development Investment Calculation Errors

33. In the ADUF and ODUF cost studies, BellSouth has taken a one-time system investment in the first year and improperly repeated that investment in subsequent years.¹⁵ This action leads to significant cost over-recovery in violation of TELRIC principles.

¹² Caldwell Deposition, p. 87:14-88:1.

¹³ See Alabama SGAT Cost Study, "ODUF.xls" Workbook, "Investments" Worksheet, Cell C15, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "Investments" Worksheet, Cell C15, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "Investments" Worksheet, Cell C15, and South Carolina SGAT Cost Study, August 2001, "ODUF.xls" Workbook, "Investments" Worksheet, Cell C15.

¹⁴ See Alabama SGAT Cost Study, "Capcalc.dbf" Database, "Annual Charge Factors" Table, Kentucky SGAT Cost Study, "Capcalc.dbf" Database, "Annual Charge Factors" Table, Mississippi SGAT Cost Study, "Capcalc.dbf" Database, "Annual Charge Factors" Table, and South Carolina SGAT Cost Study, "Capcalc.dbf" Database, "Annual Charge Factors" Table.

¹⁵ See Alabama SGAT Cost Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells F15 to J15, Kentucky SGAT Cost Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells F15 to J15, Mississippi SGAT Cost

34. In the ADUF cost study, the first year requires an investment of ***BEGIN
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BEGIN CONFIDENTIAL END CONFIDENTIAL.¹⁶ Each subsequent
year, BellSouth includes ***BEGIN CONFIDENTIAL END CONFIDENTIAL*** hours
that it claims are required to maintain the system development.¹⁷ But BellSouth takes the
BEGIN CONFIDENTIAL END CONFIDENTIAL 2002 investment and
repeats it in 2003, 2004, 2005, and 2006 even though BellSouth clearly states that the
BEGIN CONFIDENTIAL END CONFIDENTIAL hours representing the first-
year investment are not required in subsequent years. Indeed, BellSouth's cost study makes clear
that only ***BEGIN CONFIDENTIAL END CONFIDENTIAL*** hours are required in
each subsequent year. Thus, instead of recovering an investment of ***BEGIN
CONFIDENTIAL END CONFIDENTIAL*** for constructing the ADUF
system, BellSouth attempts to recover five times that amount or ***BEGIN CONFIDENTIAL
END CONFIDENTIAL*** for the one-time investment in building the ADUF
systems capabilities. In a similar manner, BellSouth seeks to recover the one-time systems
development costs for ODUF three separate times over three years.

Study, August 2001, "ADUF.xls" Workbook, "WP2" Worksheet, Cells F15 to J15, and South Carolina
SGAT Cost Study, August 2001, "ADUF.xls" Workbook, "WP2" Worksheet, Cells F15 to J15.

¹⁶ See Alabama SGAT Cost Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells F12 and F14, Kentucky
SGAT Cost Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells F12 and F14, Mississippi SGAT Cost
Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells F12 and F14, and South Carolina SGAT Cost
Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells F12 and F14.

¹⁷ See Alabama SGAT Cost Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells G10 to O10, Kentucky
SGAT Cost Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells G10 to O10, Mississippi SGAT Cost
Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells G10 to O10, and South Carolina SGAT Cost
Study, "ADUF.xls" Workbook, "WP2" Worksheet, Cells G10 to O10.

D. Failure to Capitalize All System Development Cost

35. BellSouth properly capitalized the labor hours associated with developing the systems to process ADUF, ODUF, and EODUF records. BellSouth also incurred computer resource costs in supporting the system development and inappropriately expensed these costs rather than capitalizing these resource costs with the labor hours used to develop the systems. This inconsistent treatment is clear TELRIC error.

36. In conjunction with the time spent by personnel on systems development, BellSouth incurred costs associated with systems development consisting of CPU (central processing unit), DASD Gigabyte, Tape Gigabyte, and printing costs.¹⁸ BellSouth capitalized the labor hours expended in the system development effort. Capitalizing such costs is appropriate, and the corresponding system resource costs must be capitalized as well. BellSouth's attempt to treat these system resource costs as a current expense is totally inconsistent with cost accounting and TELRIC principles.

E. Cost Recovery for Magnetic Tapes

37. BellSouth offers CLECs two alternatives for receiving the DUF records. CONNECT:DIRECT (M.2.4) allows the CLEC to obtain the DUF messages electronically from BellSouth for a per message charge. The other option is a magnetic tape (M.2.3) from BellSouth containing the messages for a specified period and billed on a per tape basis. BellSouth offers

¹⁸ See for an example of these costs Alabama SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells A156 to A159, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells A156 to A159, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells A156 to A159, and South Carolina SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells A156 to A159.

both options because smaller CLECs may not want to pay for a data circuit from BellSouth to receive the CONNECT:DIRECT feed.¹⁹

38. The problem is that BellSouth has included the costs of providing the magnetic tape feed in the general message processing cost.²⁰ Thus, CLECs electing CONNECT:DIRECT also pay the costs of the magnetic tape option. This is clearly inappropriate and in violation of TELRIC principles. The CLEC choosing to receive magnetic tapes should bear the costs of that option. The costs of the magnetic tapes should not be spread generally across the cost of processing DUF messages.

F. Inaccurate DUF Processing Forecasts

39. BellSouth has made three significant miscalculations in the demand for DUF processing. These errors distort the DUF rates and misalign costs and rates in violation of TELRIC.

40. *First*, BellSouth has understated the quantity of ODUF messages in the cost study. Understating the starting point is critical because BellSouth increases this level of ODUF messages over time to identify the total number of ODUF messages for the cost study planning period. This total number of ODUF messages is then used to allocate the costs that are identified for ODUF processing.

¹⁹ The CONNECT:DIRECT option still requires that the CLEC purchase a data circuit to receive the electronic feed of the messages from BellSouth. This charge is separate from the cost per message that BellSouth charges for this alternative.

²⁰ In BellSouth's ODUF cost study, on the INPUT worksheet, BellSouth has an input known as "Test Tape Per New OCN Receiving Tape." See Alabama SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell A161, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell A161, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell A161, and South Carolina SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell A161. As this filename indicates, BellSouth includes the cost of creating a test tape for those CLECs receiving a magnetic tape for every new OCN receiving DUF messages regardless of whether the CLEC has selected the magnetic tape option. This cost should be removed from the message processing costs for ODUF and instead moved into the magnetic tape cost study.

41. The understatement can be seen by contrasting two numbers in the ODUF cost study. In one section of the cost study, BellSouth notes that in April 2001 it processed *****BEGIN CONFIDENTIAL** **END CONFIDENTIAL***** ODUF and EODUF messages.²¹ BellSouth uses these numbers as the starting point in calculating the number of ODUF messages over the next three years. In the same cost study, however, BellSouth elsewhere states that it processed *****BEGIN CONFIDENTIAL** **END CONFIDENTIAL***** ODUF and EODUF messages in April 2001.²² BellSouth uses this value in several places in the ODUF and ADUF cost study, but does not use these numbers in its three-year projections. Using the *****BEGIN CONFIDENTIAL** **END CONFIDENTIAL***** value significantly understates the starting point for the number of ODUF messages being processed by BellSouth, and as a result, directly overstates the cost per message that CLECs must bear.

42. With the exception of the system development investment, the higher ODUF and ADUF figures are used everywhere else in the cost studies. Clearly, these lower ADUF and ODUF numbers are used to reduce the total level of DUF messages, which requires higher DUF rates to spread the costs over fewer messages.

43. *Second*, BellSouth has understated the growth rate for DUF messages. For example, BellSouth assumed a 2001 growth rate in ADUF messages of *****BEGIN CONFIDENTIAL** **END CONFIDENTIAL***** per month after May 2001.²³ Prior to May 2001,

²¹ See Alabama SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell G194, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell G194, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell G194, and South Carolina SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell G194.

²² See Alabama SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell H32, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell H32, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell H32, and South Carolina SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell H32.

²³ See Alabama SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cell G110, Kentucky SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cell G110, Mississippi SGAT Cost

however, BellSouth had actual results, and those results show a much greater growth rate of

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Thus, BellSouth assumed that the remaining 2001 growth rate would be less than half the growth rate actually experienced in the first half of the year. BellSouth made a similar reduction in the ODUF cost study growth rate.

44. BellSouth updated the rates in its SGAT filings in the March 2002 to June 2002 period. BellSouth had available full 2001 DUF message information but never explains why it used estimates for the final seven months of 2001 and not the available actual data. As the UNE-Platform has been the most significant form of competitive growth in the last couple of years in the BellSouth territory, use of actual demand data would be important to avoid understating the level of DUF messages and thereby overstating the cost.

45. A related problem is BellSouth's stingy forecast of DUF message growth in future years. After the first year, BellSouth has assumed growth of *****BEGIN CONFIDENTIAL**

END CONFIDENTIAL*** ADUF or ODUF messages per month.²⁵ This figure assumes a dramatic decline in the growth of UNE-P competition in the BellSouth region. As

Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cell G110, and South Carolina SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cell G110.

²⁴ See Alabama SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cells G98 to G102, Kentucky SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cells G98 to G102, Mississippi SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cells G98 to G102, and South Carolina SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cells G98 to G102.
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²⁵ See Alabama SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cells H110 to Q110, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells H203 to J203, Kentucky SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cells H110 to Q110, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells H203 to J203, Mississippi SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cells H110 to Q110, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells H203 to J203, and South Carolina SGAT Cost Study, "ADUF.xls" Workbook, "INPUT" Worksheet, Cells H110 to Q110, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells H203 to J203.

AT&T and other CLECs have only recently begun their marketing efforts for UNE-P in many BellSouth states, BellSouth's assumption is unrealistic, and its effect is to increase DUF rate charges for the increasing DUF message volumes that will occur.

46. This understatement in DUF messages on BellSouth's part relates to the earlier discussion in the declaration regarding BellSouth failure to utilize "total demand" in developing the cost for DUF. As noted previously, certain costs are clearly attributable to the CLECs' generation of DUF messages, and these costs should be fairly distributed among CLEC messages only. As such, when BellSouth artificially understates the volume of CLEC DUF messages, BellSouth inappropriately causes the denominator in these cost calculations to be understated resulting in an overstatement of DUF cost directly attributable to CLECs. Moreover, if the Commission does not require BellSouth to use "total demand" for the majority of DUF processing costs, then BellSouth's understatement of DUF messages has an even more dramatic impact in terms of overstating CLEC DUF charges.

47. *Third*, BellSouth has overstated the growth rate for DUF OCNs in its ADUF and ODUF studies. OCNs are billing codes used to identify charges to particular CLECs and thereby associate the DUF messages with those CLECs. BellSouth assumed that the growth rate in ODUF OCNs in 2001 would be *****BEGIN CONFIDENTIAL END CONFIDENTIAL***** per month beyond April 2001.²⁶ Prior to April 2001, BellSouth added new OCNs at a slower growth rate of *****BEGIN CONFIDENTIAL END CONFIDENTIAL***** OCNs per

²⁶ See Alabama SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell G189, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell G189, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell G189, and South Carolina SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cell G189.

month.²⁷ Thus, BellSouth has assumed that growth in OCNs will occur at more than double the actual growth rate over the past several months. Further, BellSouth's OCN growth estimate is incorrect going into the future because it is also inconsistent with BellSouth's assumption (discussed above) that message growth will be slowing significantly. It is also inconsistent with the patterns in the telecommunications industry in which various CLECs have gone bankrupt or dropped out of the local market sector in the past year. The ADUF cost study has the same difficulty.

48. Overstatement of growth in OCNs would lead to an overstatement of DUF costs in BellSouth's cost study. BellSouth has assumed that each OCN requires "support" labor each month, and the growth in OCN's also requires "development" cost to incorporate the OCN in the BBI billing systems. As such, overstating the growth rate and the total number of OCNs leads to an overstatement of costs.

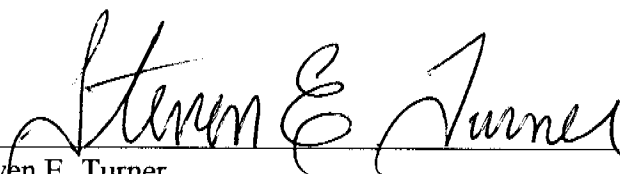
V. CONCLUSION

49. This declaration has demonstrated that BellSouth's DUF cost studies violate TELRIC principles for the six reasons documented above. BellSouth's rates for DUF are significantly greater than its costs and lead to overcharges of CLECs for an important cost element at levels that BellSouth does not incur. As a result of these TELRIC errors and the corresponding overstatement of cost, BellSouth's DUF rates do not satisfy the requirements of checklist item 2.

²⁷ See Alabama SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells G177 to G180, Kentucky SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells G177 to G180, Mississippi SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells G177 to G180, and South Carolina SGAT Cost Study, "ODUF.xls" Workbook, "INPUT" Worksheet, Cells G177 to G180.
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I declare under penalty of perjury that the facts stated herein are true and correct, to the best of my knowledge, information and belief.


Steven E. Turner

Date July 10, 2002